

In the claims:

Claims 1-60 (**cancelled**).

61. (**currently amended**) A method for treating bone loss in a mammal comprising administering to the mammal ~~an expression vector comprising~~ a nucleic acid selected from:

(a) a nucleic acid encoding an osteoprotegerin polypeptide comprising the amino acid sequence of residues 1 to 401 or residues 22 to 401 as shown in Figure 9C-9D (SEQ ID NO:124); or

(b) a nucleic acid encoding an osteoprotegerin polypeptide comprising a deletion of 1 to 216 amino acid residues from the carboxy terminus of the polypeptide in (a),

(c) and expressing said osteoprotegerin polypeptide such that bone loss is reduced.

62. (**cancelled**).

63. (**currently amended**) The method of Claim 61 62 wherein the nucleic acid encodes a polypeptide comprising residues 22-185, 22-189, 22-194, or 22-201 inclusive as shown in Figure 9C-9D (SEQ ID NO:124).

64. (**currently amended**) The method of Claim 61 62 wherein the nucleic acid further comprises an Fc region of human IgG.

65. (**currently amended**) The method of Claim 61 wherein the nucleic acid further comprises an expression vector ~~is a viral vector~~.

66. (**currently amended**) The method of Claim 61 wherein the nucleic acid ~~expression vector~~ further comprises a pharmaceutically acceptable adjuvant.

67. **(previously presented)** The method of Claim 61 wherein the bone loss is due to osteoporosis, Paget's disease, hypercalcemia, hyperparathyroidism, steroid-induced osteopenia, rheumatoid arthritis, osteomyelitis, osteolytic metastasis, or periodontal bone loss.

68. **(cancelled).**

69. **(currently amended)** A method for reducing osteoclast activity in a mammal comprising administering to the mammal ~~an expression vector comprising a~~ nucleic acid selected from:

(a) a nucleic acid encoding an osteoprotegerin polypeptide comprising the amino acid sequence of residues 1 to 401 or residues 22 to 401 as shown in Figure 9C-9D (SEQ ID NO:124); or

(b) a nucleic acid encoding an osteoprotegerin polypeptide comprising a deletion of 1 to 216 amino acid residues from the carboxy terminus of the polypeptide in (a),

(c) and expressing said osteoprotegerin polypeptide such that osteoclast activity is reduced.

70. **(cancelled).**

71. **(previously presented)** The method of Claim 69 wherein the nucleic acid encodes a polypeptide comprising residues 22-185, 22-189, 22-194, or 22-201 inclusive as shown in Figure 9C-9D (SEQ ID NO:124).

72. **(previously presented)** The method of Claim ~~69~~ 74 wherein the nucleic acid further comprises an Fc region of human IgG.

73. **(currently amended)** The method of Claim 69 wherein the nucleic acid further comprises an expression vector ~~is a viral vector~~.

74. **(currently amended)** The method of Claim 69 wherein the nucleic acid expression vector further comprises a pharmaceutically acceptable adjuvant.

75. **(previously presented)** The method of Claim 69 wherein the mammal has a loss of bone mass.

76. **(previously presented)** The method of Claim 75 wherein the bone loss is due to osteoporosis, Paget's disease, hypercalcemia, hyperparathyroidism, steroid-induced osteopenia, rheumatoid arthritis, osteomyelitis, osteolytic metastasis, or periodontal bone loss.